

Claims

1. A system for performing service operations  
5 on a machine, comprising:  
a first computer based service tool;  
a second computer based service tool;  
a computer based workbench having first and  
second application proxies and a binary network object  
10 with first and second interfaces, the first  
application proxy being coupled to the first computer  
based service tool and the second application proxy  
being coupled to the second computer based service  
tool, wherein the first computer based service tool  
15 has access to service information in the second  
computer based service tool through the computer based  
workbench.

2. A system, as set forth in claim 1, wherein  
20 the first computer based service tool provides  
diagnostic services for the machine.

3. A system, as set forth in claim 1, wherein  
the machine is a mobile work machine.

25

4. A system, as set forth in claim 1, wherein  
the binary network object uses the Component Object  
Model.

30 5. A system, as set forth in claim 1, wherein  
the first and second application proxies each comprise  
a constant portion coupled to the binary network

object and an application programming interface coupled to the constant portion.

6. A system, as set forth in claim 5, wherein  
5 data is communicated by one of the service tools to an  
other of the service tools through the respective  
constant portions.

7. A system, as set forth in claim 6, wherein  
10 the first and second computer based service tools  
communicate using a respective communication protocol.

8. A system, as set forth in claim 7, wherein  
15 the application programming interface of each of the  
first and second service tools is adapted to  
communicate using the respective communication  
protocol.

9. A system for performing service operations  
20 on a machine, comprising:  
a first computer based service tool;  
a second computer based service tool;  
a computer based workbench having first and  
second application proxies and a binary network object  
25 with first and second interfaces, the first  
application proxy being coupled to the first computer  
based service tool and the second application proxy  
being coupled to the second computer based service  
tool, wherein the first computer based service tool  
30 has access to service information in the second  
computer based service tool through the computer based  
workbench, the computer based workbench includes a

graphical user interface, the first and second computer based service tools being accessible through the graphical user interface.

5           10. A system, as set forth in claim 9, wherein the graphical user interface includes an application container and a launch pad, wherein the launch pad includes first and second buttons and wherein actuation of one of the first and second buttons  
10 launches a respective one of the first and second service tools in the application container.

          11. A system for performing service operations on a machine, comprising:  
15           a computer based diagnostic advisor;  
          a computer based service information system;  
          a computer based workbench having first and second application proxies and a binary network object with first and second interfaces, the first  
20 application proxy being coupled to the computer based diagnostic advisor and the second application proxy being coupled to the computer based service information system, wherein the diagnostic advisor has access to service information in the service  
25 information system through the computer based workbench.

          12. A system, as set forth in claim 11, including a computer based electronic technician and  
30 wherein the binary network object includes a third interface and the computer based workbench includes a third application proxy, the third application proxy

being coupled to the computer based electronic technician.

13. A system, as set forth in claim 11,  
5 including a computer based data view module and  
wherein the binary network object includes a fourth  
interface and the computer based workbench includes a  
fourth application proxy, the fourth application proxy  
being coupled to the computer based data view module.

10

14. A system, as set forth in claim 11,  
including a computer based engine performance  
estimator and wherein the binary network object  
includes a fifth interface and the computer based  
15 workbench includes a fifth application proxy, the  
fifth application proxy being coupled to the computer  
based engine performance estimator.

15. A system, as set forth in claim 11,  
20 including a computer based reports and feedback module  
and wherein the binary network object includes a sixth  
interface and the computer based workbench includes a  
sixth application proxy, the sixth application proxy  
being coupled to the computer based reports and  
25 feedback module.

16. A method for sharing service information  
between first and second service tools, including the  
steps of:  
30 providing a binary network object having first  
and second interfaces;  
providing a first application proxy coupled to

the first interface;

providing a second application proxy coupled to  
the second interface; and,

sharing service information between the first and  
5 second computer based service tools through the first  
and second application proxies and the first and  
second interfaces.

17. A method, as set forth in claim 16, wherein  
10 the first computer based service tool provides  
diagnostic services for the machine.

18. A method, as set forth in claim 16, wherein  
the machine is a mobile work machine.

15 19. A method, as set forth in claim 16, wherein  
the binary network object uses the Component Object  
Model.

20 20. A method, as set forth in claim 16, wherein  
the first and second application proxies each comprise  
a constant portion coupled to the binary network  
object and an application programming interface  
coupled to the constant portion.

25 21. A method, as set forth in claim 20,  
including the step of communicating data by one of the  
service tools to an other of the service tools through  
the respective constant portions.

30 22. A method, as set forth in claim 21, wherein  
the first and second computer based service tools

communicate using a respective communication protocol.

23. A method, as set forth in claim 22, wherein the application programming interface of each of the first and second service tools is adapted to communicate using the respective communication protocol.

24. A method for sharing service information between first and second service tools , including the steps of:

providing a binary network object having first and second interfaces;

providing a first application proxy coupled to the first interface;

providing a second application proxy coupled to the second interface;

sharing service information between the first and second computer based service tools through the first and second application proxies and the first and second interfaces; and,

providing a graphical user interface, the first and second computer based service tools being accessible through the graphical user interface.

25

25. A method, as set forth in claim 24, including the step of providing the graphical user interface with an application container and a launch pad, wherein the launch pad includes first and second buttons and wherein actuation of one of the first and second buttons launches a respective one of the first and second service tools in the application container.

26. A method for sharing service information  
between a computer based diagnostic advisor and a  
computer based service information system, including  
5 the steps of:

providing a binary network object having first  
and second interfaces;

providing a first application proxy coupled to  
the first interface;

10 providing a second application proxy coupled to  
the second interface; and,

sharing service information between the computer  
based diagnostic advisor and the computer based  
service information system through the first and  
15 second application proxies and the first and second  
interfaces.

27. A computer program product for sharing  
service information between a first computer based  
20 service tool and a second computer based service tool,  
including the steps of:

computer readable program code means for  
providing a binary network object having first and  
second interfaces;

25 computer readable program code means for  
providing a first application proxy coupled to the  
first interface;

computer readable program code means for  
providing a second application proxy coupled to the  
30 second interface; and,

computer readable program code means for sharing  
service information between the first and second

2025 RELEASE UNDER E.O. 14176

computer based service tools through the first and second application proxies and the first and second interfaces.